Vol. 34, No. 3

South Florida Section American Chemical Society

April/May 2024



In-Person and Virtual Section Seminar

Friday, April 26, 12:30 PM

Twohig Science Center 105

Barry University, 11300 NE 2nd Ave., Miami Shores

Or join online: https://barryuniversity.webex.com/barryuniversity/j.php?MTID=m1dd9535e23c984e4f536ec8150f1d179

Dr. Mary Carroll

ACS President and

Dwane W. Crichton Professor of Chemistry, Union College, Schenectady, NY

Aerogel Materials: A Journey from Research to Commercialization

Abstract: Aerogels are porous materials with unusually high surface areas and low densities that give them simply remarkable properties. Silica aerogel materials, in particular, are of interest for window applications. They are thermal, electrical and acoustic insulators, and can be fabricated in monolithic forms that are translucent or even transparent in the visible region of the electromagnetic spectrum. Invention and development of a rapid supercritical extraction (RSCE) method has allowed an interdisciplinary team of undergraduate students and faculty members to make substantive contributions to the scientific literature and facilitated productive internal and external collaborations. In this presentation I will introduce the Union College RSCE method for fabricating aerogel monoliths, provide an overview of research enabled by the RSCE method, and describe the progress of a start-up company, SunThru LLC, founded to bring that technology from the lab to the marketplace.

Bio: Mary earned a BS in chemistry from Union College, a PhD in analytical chemistry from Indiana University, Bloomington, and performed postdoctoral research at the University of Massachusetts, Amherst. At Union College, she teaches courses in introductory and analytical chemistry and mentors undergraduate research students. She co-directs the Union College Aerogel Lab, a vibrant and productive interdisciplinary research group. In addition to fundamental studies, the group investigates applications of aerogels in sustainable buildings, chemical sensing, drag reduction, and automotive pollution mitigation. Mary co-founded SunThru LLC to commercialize the aerogel technology developed at Union. Mary has been a member of ACS since 1986 and an ACS volunteer leader since 1993. She served as Councilor of the Eastern New York ACS section from 1998-2022, representing the section at Council meetings and participating in ENY Executive Committee meetings. At the national level, she has served on the ACS Committee on Science (COMSCI), the ACS Leadership Advisory Board (LAB) and served and held leadership positions on the ACS Council Policy Committee (CPC), the ACS Society Committee on Education (SOCED), the ACS Women Chemists Committee (WCC), and numerous working groups and task forces. Based on her contributions to science and service to the ACS, she was selected for recognition as a member of the class of 2016 ACS Fellows.

Nama(e)

Sofl-ACS AWARDS LUNCHEON

Sunday, April 28

11:30 AM Reception and Poster Session Noon – 2:30 PM Buffet and Awards

> Wolfe Student Center 221-223 FIU Biscayne Bay Campus 3000 N.E. 151st Street, North Miami

> > Keynote Speaker Dr. Mary Carroll ACS President

Cost: \$30.00 ACS members and guests; \$15.00 Students

Send reservation form with check payable to SoFL-ACS by Monday, April 22 to:

Dr. Jesse Bernstein 5565 Celebration Drive Ave Maria, FL 34142 jbern0309@gmail.com

Address
School if a student
Number of reservations: @ \$30.00 = \$
Number of reservations: @ \$15.00 = \$
Total enclosed \$



April 21-27, 2024 | #CCEW

Join the South Florida Local Section of the American Chemical Society for a community event for Chemists Celebrate Earth Week to celebrate the importance of chemistry in everyday life! Learn about this year's theme, Get A Charge Out Of Chemistry, with exciting hands-on activities at the Museum of Discovery and Science (MODS) in Fort Lauderdale. Free with museum admission. This event will be in conjunction with MODS' Star Wars Day.



When:

Saturday, May 4, 2024, from 12pm-3pm Where:

Museum of Discovery and Science 401 SW Second Street Fort Lauderdale, FL 33312



For questions about the event, please contact Lorilee Valientes, NCW/CCEW Coordinator, at lvalient@fiu.edu.

We hope to see you there!





AMERICAN CHEMICAL SOCIETY

